AMENDMENT OF SOLICITA	TION/MODIF	ICATION OF CONTRACT		1. CONTRACT	ID CODE	PAGE O	F PAGES 9
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.			5. PROJECT	1	_
0003	02-Feb-2005						
6. ISSUED BY CODE	N65540	7. ADMINISTERED BY (If other than item 6)		COI	DE		
NAVAL SURFACE WARFARE CENTER, CARDEROCK CODE 3352, ANNMARIE BARTHOLOMEO 5001 SOUTH BROAD ST PHILADELPHIA PA 19112-1403		See Item 6					
8. NAME AND ADDRESS OF CONTRACTOR	(No., Street, County, S	State and Zip Code)		A. AMENDMI N65540-05-R-0		LICITATI	ON NO.
			x 9	9B. DATED (SE 03-Jan-2005		1)	
				F CONTRACT/ORDER NO.			
			1	0B. DATED (SEE ITEM	13)	
CODE	FACILITY COD		CITA	TIONG			
X The above numbered solicitation is amended as set forth		PPLIES TO AMENDMENTS OF SOLIO	$\overline{}$	extended,	is not exter	nded	
Offer must acknowledge receipt of this amendment prical By completing Items 8 and 15, and returning 1 or (c) By separate letter or telegram which includes a re RECEIVED AT THE PLACE DESIGNATED FOR THE REJECTION OF YOUR OFFER. If by virtue of this are provided each telegram or letter makes reference to the	copies of the amendment ference to the solicitation a E RECEIPT OF OFFERS mendment you desire to chan	at; (b) By acknowledging receipt of this amendme and amendment numbers. FAILURE OF YOUR PRIOR TO THE HOUR AND DATE SPECIFIED age an offer already submitted, such change may	ent on ea ACKNO D MAY be made	ach copy of the off OWLEDGMENT? RESULT IN by telegram or let	ГО ВЕ		
12. ACCOUNTING AND APPROPRIATION DA	TA (If required)						
		O MODIFICATIONS OF CONTRACT					
A. THIS CHANGE ORDER IS ISSUED PURSU CONTRACT ORDER NO. IN ITEM 10A.		T/ORDER NO. AS DESCRIBED IN ITI uthority) THE CHANGES SET FORTH			IADE IN T	НЕ	
B. THE ABOVE NUMBERED CONTRACT/Coffice, appropriation date, etc.) SET FORT					as changes i	n paying	
C. THIS SUPPLEMENTAL AGREEMENT IS	ENTERED INTO PU	RSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification and	authority)						
E. IMPORTANT: Contractor is not,	is required to sig	n this document and return	copie	es to the issuing	g office.		
DESCRIPTION OF AMENDMENT/MODIFIC where feasible.) Provide answers to offeror's questions. Also			citatio	on/contract subj	ect matter		
Except as provided herein, all terms and conditions of the do		A or 10A, as heretofore changed, remains unchar	nged an	d in full force and	effect.		
15A. NAME AND TITLE OF SIGNER (Type or	print)	16A. NAME AND TITLE OF CO	NT R	ACTING OFFI	CER (Type	or print)	
	1	TEL:		EMAIL:			
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNEI	D 16B. UNITED STATES OF AME	RICA		160	C. DATE S	SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Of	ficer)		0	1-Feb-200)5

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

The following items are applicable to this modification:

AMENDMENT 0003

- A. The time for receipt of offers is extended until 22 February 2005, 1330 hours (1:30 p.m.)
- B. The following answers are provided to additional contractor questions:

Question 1. Para 3.5.1 refers to a drawing NAVSEA No. 803-1385850, Rev. J, dated 31 July 1990. Can you please provide a copy or identify a website where we can download this drawing.

Answer 1. The drawing is attached to this Amendment. You will need to download a free Government viewer from the following website:

Website for ImageR drawing viewer... http://jtshelp.redstone.army.mil/jmx httm/jmxdl.html

Question 2. Section L page 36 of 43 identifies the requirement for a separate cost proposal and cost proposal spreadsheets to be provided on diskettes. Further Section M page 41 of 43 CAR-M02 para (c)(2) Price Proposal identifies the evaluation criteria for price including a discussion of price realism. However under Para CAR-11 Proposal Preparation Requirements there is no discussion of the requirements for the cost proposal or what level of detail is required to be submitted to permit the government to undertake a price realism analysis and evaluate the cost proposal, or what data the spread sheets should include. Could you please clarify.

Answer 2. A separate cost proposal and cost proposal spreadsheets to be provided on diskettes are not required. Prices are to be entered in Section B of the RFP (Standard Form 33).

Although a separate cost proposal is not required, the contracting officer will review the proposed prices to insure that the required items can be provided at the proposed prices.

Question 3. Further to question 2, can you advise how price will be evaluated. For example, will it be the sum of all the totals of all CRDLS in Section B? Or will it be the sum of only 0001AA and 0001AB, 0001AC? In this regard, if CDRL 0001AA is included in the price evaluation, can you please advise(as stated in SOW Para 4.3 First Article Test) if the US Navy has approved any designs and/or previously qualified any units for production which would then permit a waiver of First Article Test for this project. Moreover, if any bidder does not supply a price for CRDL 0001AA is their bid disqualified on the basis of a non compliant offer.

Answer 3. Price will be evaluated by adding up the totals of CLINs 001AA through 0001AG. It is noted that CLINs 0001H through 001AJ are not separately priced. In the event that the requirement for First Article testing (CLIN 0001AA) is waived for an offeror, the proposed price for CLIN 0001AA will not be included in the evaluated price for that offeror.

Naval Surface Warfare Center Carderock Division does not know of any approved designs or previously qualified unit in this size range.

All offerors should propose a price For CLIN 0001AA in case a requested First Article Waiver is not approved by the Government.

Question 4. SOW Para 3.19.24 Permeate Treatment discuss the requirement for a UV sterilizer. Can you please confirm if this component is to be provided on the skidded system or at the inlet to the permeate storage tanks? Secondly, we have been advised, at our initial discussions with UV manufacturers, that the requirement to conform to ANSI/NSF 55-2002 is not available in this size system, to the best of their knowledge. ANSI/NSF 55-2002 is a qualification undertaken for UV sterilizers and can cost in \$10K's of dollars. To their understanding, for example, it is not applied to small UV systems in the municipal market, however many large capacity/high flow system have been qualified. If the US Navy knows of a system that is qualified could you please advise us of the manufacturer and part number. Also, could you please review this requirement and provide us guidance on this issue.

Answer 4. The Navy has recently qualified an UV sterilizer under another program to the intent of NSF 55 with BUMED approval and will utilize this design for this application to reduce the overall program cost to the Navy and avoid the additional cost to qualify a second design for this application. The UV sterilizer will be mounted off the unit in the ships distillate transfer pump discharge to the ships potable water tanks. The Statement of Work is revised later in this Amendment.

Question 5. SOW Para 3.3.3 Natural Seawater Feed Characteristics stated the MAXIMUM SDI is equal to 6.0 However, para 4.5.1 states that for the 45 day qualification test the SDI must be at least 6.0. Our interpretation is that these two statements are in conflict. To achieve an exact value of 6.0 on natural seawater may not be easily accomplished. Could you please clarify your interpretation of the SDI requirement for the system and for the 45 day test.

Answer 5. Concur, maintaining a constant SDI is not possible. A suitable operating range will be incorporated into the Statement of Work later in this Amendment.

Question 6. Paragraph 3.5, Controls and Indicators, starting at line 20 reads: "Each of these circuits (analog in millivolts) will be connected to a dedicated data acquisition / command interface from the ships machinery control consoles."

- a. Are isolated terminal blocks required?
- b. Or, is this an Ethernet type of connection?
- c. Or, is that some other protocol that must be supplied?

Answer 6. Suitable terminals connections for each remote circuit are required. An Ethernet interface is not required.

	Section B, "Supplies or Services and ted to read as follows:	nd Prices'	, CLINS 0001AA,	0001AB and 0001AC
0001AA	First Article Testing-to include Unit Testing and Rehab Costs Of the Tested Units Note: First Article Test Report to 45 days after First Article Testing but not later than 205 days after d	be submit	ed	\$
0001AB	Production Units Same As Item 0001 Orders placed in CY05	14 EA	\$	\$
0001AC	Production Units Same As Item 0001 Orders placed in CY05	2 EA	\$	\$

C. The following changes are made to the solicitation:

2. The first portion of the clause entitled "Clause CAR-L11 PROPOSAL PREPARATION REQUIREMENT (JUN 1996) (NSWCCD)" cited on page 36 of the solicitation is corrected to cite as follows:

"CAR-L11 PROPOSAL PREPARATION REQUIREMENT (JUN 1996) (NSWCCD)

It is requested that offerors prepare their proposals in accordance with the following organization, content and format requirements to assist the government in making a complete and thorough evaluation of all proposal. Proposals shall be submitted as two separate documents, as follows:

Documents	Original	Copies
Solicitation, Offer and Award Document (SF-33) 1	2
Technical Proposal	1	4

The "originals" shall be clearly identified as the "ORIGINAL", and bear the original signature(s) of the offeror. The "copies" shall be complete and clearly identified as "COPY" or "DUPLICATE".

(1) SOLICITATION, OFFER AND AWARD DOCUMENTS (SF-33 RFP)"

3. The following clause is set forth in full in Section I of the solicitation:

52.209-3 -- First Article Approval -- Contractor Testing (Sep 1989)

- (a) The Contractor shall test two unit(s) of Lot/Item 0001AA as specified in this contract. At least 14 calendar days before the beginning of first article tests, the Contractor shall notify the Contracting Officer, in writing, of the time and location of the testing so that the Government may witness the tests.
- (b) The Contractor shall submit the first article test report within 205 calendar days from the date of this contract to NSWCCD, Attn: Richard Steck, Code 9232, 5001 S. Broad St., Philadelphia, PA 19112-5083 marked "First Article Test Report: Contract No. (To be determined), Lot/Item No. 0001AA" Within 30 calendar days after the Government receives the test report, the Contracting Officer shall notify the Contractor, in writing, of the conditional approval, approval, or disapproval of the first article. The notice of conditional approval or approval shall not relieve the Contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the Contractor. A notice of disapproval shall cite reasons for the disapproval. (c) If the first article is disapproved, the Contractor, upon Government request, shall repeat any or all first article tests. After each request for additional tests, the Contractor shall make any necessary changes, modifications, or repairs to the first article or select another first article for testing. All costs related to these tests are to be borne by the Contractor, including any and all costs for additional tests following a disapproval. The Contractor shall then conduct the tests and deliver another report to the Government under the terms and conditions and within the time specified by the Government. The Government shall take action on this report within the time specified in paragraph (b) above. The Government reserves the right to require an equitable adjustment of the contract price for any extension of the delivery schedule, or for any additional costs to the Government related to these tests.
- (d) If the Contractor fails to deliver any first article report on time, or the Contracting Officer disapproves any first article, the Contractor shall be deemed to have failed to make delivery within the meaning of the Default clause of this contract.
- (e) Unless otherwise provided in the contract, and if the approved first article is not consumed or destroyed in testing, the Contractor may deliver the approved first article as part of the contract quantity if it meets all contract requirements for acceptance.
- (f) If the Government does not act within the time specified in paragraph (b) or (c) above, the Contracting Officer shall, upon timely written request from the Contractor, equitably adjust under the changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.
- (g) Before first article approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the Contractor. Before first article approval, the costs thereof shall not be allocable to this contract for
 - (1) progress payments, or
 - (2) termination settlements if the contract is terminated for the convenience of the Government.
- (h) The Government may waive the requirement for first article approval test where supplies identical or similar to those called for in the schedule have been previously furnished by the

offeror/contractor and have been accepted by the Government. The offeror/contractor may request a waiver.

(End of Clause)

4. The following clause is added to Section M of the solicitation:

PRICE EVALUATION

Price will be evaluated by adding up the totals of CLINs 001AA through 0001AG. It is noted that CLINs 0001H through 001AJ are not separately priced. In the event that the requirement for First Article testing (CLIN 0001AA) is waived for an offeror, the proposed price for CLIN 0001AA will not be included in the evaluated price for that offeror.

5. Table 1 of the Statement of Work is revised as follows: FROM:

DESCRIPTION		INDICATION	SHUTDOWN	REMOTE INDICATION
Pressure				
Feedwater supply	X			
Freshwater flush supply (when flushing)	X	LO	LO	Summary fault
Permeate discharge press	X			
HP pump suction	X		LO	Summary fault
HP pump discharge	X		HI	Summary fault
Analog Signa	al			-
Media and Cartridge Filte	er			
Inlet	X			
Outlet	X			
Differential pressure				
Cartridge Filter	X	HI		Summary alarm
Media Filter	X	HI		Summary alarm
		(if not reset fol	lowing backflush)
Temperature			_	
Feed inlet	X			
Flow				
Feedwater or brine	X			
First Pass Permeate (gpm	ı) X			
Final Permeate (gpm)	X			
Final Permeate (totalizing	g)X			
Salinity				
First pass conductivity	X			
Final permeate conductiv	rity X	HI		Summary alarm
(trips dumping system)	•			Analog Signal
High pressure pump ove	erload	O	verload	Summary fault
Elasped operating time X				
Permeate Sterilizer Failu		Summar	=	

TO:

TABLE I.- LIST OF MONITORS, ALARMS, AND SHUTDOWNS

DESCRIPTION	INDICATION, METER	/ ALARM INDICATION	RO UNIT	REMOTE INDICATION	
Pressure					
Feedwater supply	X				
Freshwater flush supp	ly X	LO	LO	Summary fault	
(when flush:	ing)				
Permeate discharge pre	ess X				
HP pump suction	X		LO	Summary fault	
HP pump discharge	X		HI	Summary fault	
Analog Signal	1				
Media and Cartridge F	ilter				
Inlet	X				
Outlet	X				
Differential pressure					
Cartridge Filter	X	HI		Summary alarm	
Media Filter	X	HI		Summary alarm	
		(if not rese	et followi	ng backflush)	
Temperature					
Feed inlet	X				
Flow					
Feedwater or brine	X				
First Pass Permeate(g)	om) X				
Final Permeate (gpm)	X				
Final Permeate (total:	izing)X				
Salinity					
First pass conductivit	ty X				
Final permeate conduct	tivity X	HI		Summary alarm	
(trips dumping system	m)		I	nalog Signal	
High pressure pump over	rload		Overload	Summary fault	
Elasped operating time	X				

6. The following paragraph is added to the Statement of Work:

3.19.24 Permeate Treatment

The RO unit shall be provided with an ultraviolet sterilizer in the final permeate discharge to the ships potable water tanks. The sterilizer shall conform to ANSI/NSF 55-2002. Provisions shall be provided to secure power to the sterilizer under no flow conditions and indicate an alarm condition upon sterilizer failure.

7. Paragraphs 4.3 and 4.5.1 of the Statement of Work are revised as follows:

FROM:

4.3 First Article Inspection First article inspection shall consist of examinations and tests specified in Table III. For designs not previously approved for U.S. Navy shipboard use, a design review meeting shall be held prior to initial manufacturing of the unit to evaluate the design and review the calculations and analysis for the RO unit. This design review meeting does not absolve the manufacturer of responsibility for meeting the

requirements of this specification. Unless the Navy has previously qualified the unit being offered for production, a 45-day (2160-hour) qualification test shall be conducted on full density natural seawater to demonstrate the unit's ability to meet the requirements for performance, reliability, and endurance. A procedure for this test shall be submitted to NSWC for review and approval 20 days prior to commencement of the test.

4.5.1 45 Day Qualification Testing

For new RO system designs and vendor first-article testing, a 45day test on natural seawater is required (see para. 4.3). Test shall be conducted by a NSWC approved independent, certified test facility. For this test, a single 1,200 GPD RO unit shall be operated continuously (or as nearly so as practical) for 45 days using natural, full-density seawater of $32,000 \text{ ppm} \pm 4000 \text{ ppm}$ TDS with a 15 minute SDI of at least 6.0. A closed loop test facility is prohibited for this test. A means shall be provided for operating the RO unit at feedwater temperatures between 75 to 104 degrees F and 45,000 ppm ± 2000 ppm TDS to demonstrate its ability to meet the capacity and salinity required in para. 3.3. This operating range test shall be accomplished at the beginning of the 45 day test and at the end. A portion of the brine and permeate maybe re-circulated for this portion of the test. Performance shall be within the requirements listed in para. 3.3. Additionally, at least one hour of testing shall be conducted at 60 degrees F, plus or minus 3 degrees F, seawater feed temperatures. shall be demonstrated that the capacity over the specified period of operation is not less than the specified rated capacity at minimum inlet temperature and conditions specified in para. 3.3.1.1. Operational requirements of para. 3.4 and membrane flux density (see para. 3.19.13) shall be demonstrated. There shall be no more than a 15 percent reduction in normalized production rate between the start and completion of the test. Normalization shall be determined in accordance with ASTM D4516 to standard conditions. Standard permeate pressure shall be assumed to be 15 psig. Permeate water quality shall meet the requirements of para. 3.3.4 at all times during the test, based on 45,000 ppm feed water (see para. 4.5.3). There shall be no more than a 15 percent increase in permeate salinity (ppm TDS) over the course of this test. Membrane data and analysis shall be utilized to verify the capability of the unit to meet production under the fouled condition. The accuracy of the salinity monitoring system shall be demonstrated during this test.

TO:

4.3 First Article Inspection

First article inspection shall consist of examinations and tests specified in Table III. For designs not previously approved for U.S. Navy shipboard use, a design review meeting shall be held prior to initial manufacturing of the unit to evaluate the design and review the calculations and analysis for the RO unit. This design review meeting does not absolve the manufacturer of responsibility for meeting the requirements of this specification. Unless the Navy has previously qualified the unit being offered for production, a 45-day (1080 -hour) qualification test shall be conducted on full density natural seawater to demonstrate the unit's ability to meet the requirements for performance, reliability, and endurance. A procedure for this test shall be submitted to NSWC for review and approval 20 days prior to commencement of the test.

4.5.1 45 Day Qualification Testing

For new RO system designs and vendor first-article testing, a 45day test on natural seawater is required (see para. 4.3). Test shall be conducted by a NSWC approved independent, certified test facility. For this test, a single 1,200 GPD RO unit shall be operated continuously (or as nearly so as practical) for 45 days using natural, full-density seawater of $32,000 \text{ ppm} \pm 4000 \text{ ppm}$ TDS with a 15 minute SDI of 5.25 to approximately 6.2 shall be monitored and maintained for the duration of the test. The SDI shall be measured every 48 hours, during weekdays only, at the inlet to the RO unit and flow adjustments made as required to maintain the SDI within the desired range. A closed loop test facility is prohibited for this test. A means shall be provided for operating the RO unit at feedwater temperatures between 75 to 104 degrees F and 45,000 ppm ± 2000 ppm TDS to demonstrate its ability to meet the capacity and salinity required in para. 3.3. This operating range test shall be accomplished at the beginning of the 45 day test and at the end. A portion of the brine and permeate maybe recirculated for this portion of the test. Performance shall be within the requirements listed in para. 3.3. Additionally, at least one hour of testing shall be conducted at 60 degrees F, plus or minus 3 degrees F, seawater feed temperatures. It shall be demonstrated that the capacity over the specified period of operation is not less than the specified rated capacity at minimum inlet temperature and conditions specified in para. 3.3.1.1. Operational requirements of para. 3.4 and membrane flux density (see para. 3.19.13) shall be demonstrated. There shall be no more than a 15 percent reduction in normalized production rate between the start and completion of the test. Normalization shall be determined in accordance with ASTM D4516 to standard conditions. Standard permeate pressure shall be assumed to be 15 psig. water quality shall meet the requirements of para. 3.3.4 at all times during the test, based on 45,000 ppm feed water (see para. 4.5.3). There shall be no more than a 15 percent increase in permeate salinity (ppm TDS) over the course of this test. Membrane data and analysis shall be utilized to verify the capability of the unit to meet production under the fouled condition. The accuracy of the salinity monitoring system shall be demonstrated during this test.

8. For Data Item A018, Contract Data Requirements List (DD Form 1423), the quotation cited in Block 16 for Block 12 is changed to cite as follows:

Block 12: Submit within 45 days after First Article Testing completed but not later than 205 days after date of contract.